

# Greenwood Chemical Company

Newton, Albemarle County, Virginia  
Superfund Program Site Fact Sheet

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**Type of Facility:** Specialty Chemical Manufacturer

**Contaminants:** Toluene, Naphthalene, Various Naphthalene Derivatives, Arsenic, and Cyanide

**Funding:** Fund Financed

## Site Description and History

The Greenwood Chemical Company, an 18-acre site in Albemarle County, Virginia, manufactured specialty chemicals for approximately 40 years. After an April 1985 toluene explosion and fire that killed four workers, the facility ceased operations. Water and sludge from former lagoons, drums containing unknown wastes and materials in the drum disposal area (on the surface and buried), and contaminated soils were present at various locations on the site. The most prevalent contaminants were toluene, naphthalene, various naphthalene derivatives, arsenic, and cyanide.

The site was listed on the National Priorities List (NPL) on July 1, 1987. In April 1988, the Environmental Protection Agency (EPA) conducted a removal action at the site to stabilize and contain the hazardous wastes. Actions included:

- treatment of lagoon water and stabilization of lagoon sludge with fly ash
- over packing approximately 520 drums excavated from the drum disposal area
- construction of diversion/drainage ditches to reduce surface water run-on
- infiltration and erosion,
- installation of monitoring wells
- sampling and analysis of ground water from the monitoring wells and area residential wells

On-site ground water is contaminated, but area residential wells have not been affected at this time. Homes, farms, and community buildings are close to the site. Approximately 1,600 people, living within three miles of the site, are dependent on private wells as their source of drinking water. The site was split into four operable units (OUs) to facilitate the remedial work.

**OU-1** covered remediation of the shallow soils (less than 15 feet in depth). The Record of Decision (ROD) for OU-1 was signed on December 29, 1989, and identified off-site

incineration and disposal as the preferred alternative. Soil removal from seven areas, including former disposal lagoons, pits and trenches was completed in August 1996.

**OU-2** relates to ground water and lagoon water. The ROD for OU-2 was signed on December 31, 1990. The treatment for the water was precipitation, ultraviolet oxidation, and carbon filtration. Construction on the Wastewater Treatment Plant was overseen by the U. S. Army Corps of Engineers (USACE) and completed in August 2000. EPA took possession of the facility in March 2002 after an initial test period. OMI, Inc. has operated the facility since it was constructed.

**OU-3** involves on-site buildings. An ESD was issued in July 1991 and addressed the removal of manufacturing buildings and their contents. The buildings were removed to access underlying contaminated soil as part of the OU-1 remedial action. Removal actions began on September 30, 1991, and were completed on October 15, 1993.



**OU-4** concerns the deeper contaminated soils (greater than 15 feet in depth) and also addresses certain arsenic contaminated soils on site. The operable unit is described in the March 1994 ESD for OU-1.

### **Threats and Contaminants**

Specific contaminants detected in on-site ground water and soils include volatile organic compounds (VOCs), such as toluene and chloroform. In addition, semi-volatile organic compounds (SVOCs), such as naphthalene, and inorganic contaminants, such as arsenic, are present from former plant operations. On-site lagoon sludge contains VOCs, such as toluene and benzene, and cyanide. Potential health threats include ingestion or direct contact with contaminated ground water, soil, and sludge contaminated with VOCs, SVOCs, and inorganic compounds.

### **Current Site Status**

**OU-2** - OMI, Inc. continues to operate the facility. Lagoons 4 and 5 will be closed as part of a final site-wide remedy and additional withdrawal wells may be added. A Focused Feasibility Study concerning the lagoons was completed in March 2003.

**OU-4** - A Focused Feasibility Study (FFS), including additional sampling is being prepared by the USACE. Several draft versions of the FFS were completed between September 2001 and July 2002, and the FFS will be finalized in spring 2003. In conjunction with the FS, a Proposed Remedial Action Plan (PRAP) is being prepared describing the preferred remedial alternative for the entire site and a draft plan will be issued in spring 2003. Routine sampling of site monitoring wells and off-site wells will continue.

### **Community Relations and Concerns**

A proposed plan meeting was held on November 8, 1990, and an update meeting on April 4, 1991. EPA and the State conducted community interviews for the updated Community Relations Plan between June 25 and 27, 1991. EPA hosted a community workshop on December 5, 1991, to discuss the upcoming building demolition.

The Piedmont Environmental Council was awarded a Technical Assistance Grant. The Greenwood Citizens Council and the Piedmont Environmental Council petitioned the Virginia Department of Health for a public meeting on the health assessment. The public meeting was held on September 16, 1993. Several public meetings were conducted during the construction phase of OU-1 Remedial Action (RA) in an attempt to find an incineration site.

An EPA/Agency for Toxic Substances and Disease Registry (ATSDR) public availability meeting was held on March 18, 1999 to discuss continued community health concerns over past site exposures.

<b>VDEQ Representative</b>	<b>Information Repository</b>
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